ABSTRACT:

The invention regards an improved voltage converter with increased current capability. The voltage converter architecture may be configured by software. In the prior art programmable charge pumps have been configured in such a way, that the unused stages were simply short circuited by a decoding logic. According to the invention these stages are used to increase the current capability of the first pumping stage. In particular the result is an increase in current capability of a proposed charge pump device by 10 % to 15 % without the need of additional parts and within the same area.